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The attached table provides descriptions of all variables.

Other comments:

Fine mode is separated from the coarse mode in the AERONET database for wet size distributions. The inflection point radius between modes is reduced by the hygroscopic growth factor (like all of the radii in this retrieval). That is, $\text{radius(dry)} = \text{radius(wet)}/\text{HGF}$.

The volume concentrations are linearly related to the aerosol mass in the atmospheric column. PM concentration cutoffs occur at various AERONET retrieval radii (i.e., rather than interpolating between AERONET radii).

"Dry" components include black carbon and another inclusion (usually ammonium sulfate). Optical calculations of dry components (`aot_dry_550`, `AAOD_dry_550`, `Reff_dry`, `Qeff_dry`, etc.) assumes that BC and the other inclusion (usually sulfate) are internally mixed.

Wet single scatter albedo: $(\text{aot_calc_550} - \text{AAOD_550}) / \text{aot_calc_550}$

Dry single scatter albedo: $(\text{aot_dry_550} - \text{AAOD_dry_550}) / \text{aot_dry_550}$

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Variable	Description
doy	day of year
lwp_gm2	aerosol liquid water path
lwp_gm2_fine	aerosol liquid water path of fine mode
h2ov_cm	precipitable water vapor (from AERONET)
soot_mass	column soot concentration, mg/m ²
fract_wtr	volume fraction of water
AOT_440	measured aerosol optical depth, 440 nm
aot_calc_550	wet aerosol optical depth calculated from size distribution and refractive index; 550 nm
aot_dry_550	dry aerosol optical depth calculated from size distribution and refractive index; 550 nm
aot_fine_dry_550	dry aerosol optical depth of fine mode (calculated); 550 nm
AE_500_870	measured Angstrom exponent using 500 (or 490) and 870 nm wavelengths
AE_380_440	measured Angstrom exponent using 380 and 440 (or 443) nm wavelengths
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V_calc	Column volume concentration (um) of ... wet aerosols
V_calc_dry	... of dry aerosol component
V_fine_dry	... of the fine mode
V_pm1_dry	... of dry aerosol component with radii 0.57 um (PM 1)
V_pm2_dry	... of dry aerosol component with radii 1.3 um (PM 2.5)
V_pm10_dry	... of dry aerosol component with radii 5.06 um (PM 10)
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HSF_550	(wet scattering coefficient)/(dry scattering coefficient) at 550 nm; (calculated from size distribution and refractive indices)
HSF_550_fine	same as HSF_550, but for fine mode
AAOD_550	aerosol absorption optical depth at 550 nm
AAOD_dry_550	... of dry aerosol component
AAOD_fine_dry_550	... of dry aerosol component for the fine mode
Reff	effective radius (um)
Reff_dry	effective radius of dry component (um)
Qeff	effective extinction efficiency
Qeff_dry	effective extinction efficiency of dry component
refr_range	(m_r at 1020 nm minus m_r at 440 nm); useful for flagging suspicious retrievals
refr_670	real refractive index at 670 nm
mode_sep	Inflection Point in AERONET database (μ m)
tm_rh	equilibrium relative humidity associated with the real refractive index of the aerosol mixture (Tang and Munkelwitz, 1994)
prcnt_sphrs	percent spheres (from AERONET)
Monthly output:	
_avg	monthly average suffix
_sd	standard deviation suffix
ff_avg	Monthly average of dry fine volume fraction
ff_sd	Standard deviation of dry fine volume fraction